(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number
WO 2005/057490 A3

(51) International Patent Classification[7]: G06T 5/00

(21) International Application Number:
PCT/GB2004/005049

(22) International Filing Date:
1 December 2004 (01.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0328326.4 5 December 2003 (05.12.2003) GB

(71) Applicant (*for all designated States except US*): BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY [GB/GB]; 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(72) Inventor; and
(75) Inventor/Applicant (*for US only*): STENTIFORD, Frederick, Warwick, Michael [GB/GB]; Sheepstor, Boyton, Woodbridge, Suffolk IP12 3LH (GB).

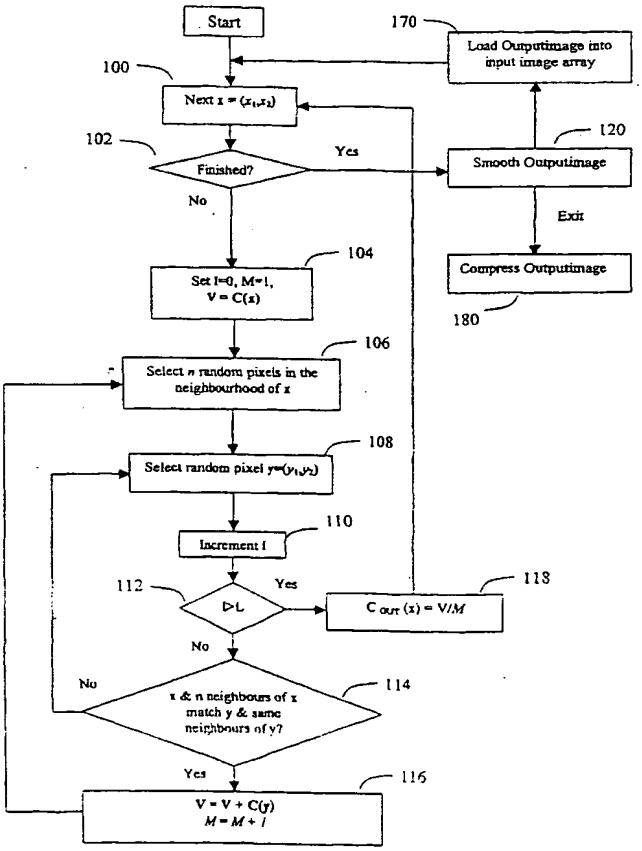
(74) Agent: LLOYD, Barry, George, William; BT Group Legal Intellectual Property Department, PP C5A, BT Centre, 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: DIGITAL IMAGE ENHANCEMENT



(57) Abstract: Picture elements of a digitally coded image are each represented by a colour value. The value of an element is adjusted by firstly making a number of comparisons between the element and elements y elsewhere in the image. This comparison involves comparing a first picture element group (which comprises the picture element x under consideration and at least one further picture element in the vicinity thereof) with a second picture element group. The second picture element group comprises a base picture element y and at least one further picture element, the number of picture elements in the second group being the same as the number of picture elements in the first group and the position of the or each further element of the second group relative to the base picture element of the second group being the same as the position of the or a respective further element of the first group relative to the picture element under consideration. The comparison determines (114) whether the two groups match in the sense that they meet a criterion of similarity. When at least one comparison results in a match, a replacement colour value for the picture element under consideration is generated (116), as a function of the colour value for the base picture element of the or each second group for which a match was obtained.

WO 2005/057490 A3